

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)

2. (original) A device for converting a header of a packet to forward the packet to an appropriate one of output ports of a switch fabric, comprising:
 - at least one line interface;
 - a reserved line interface corresponding to each of said at least one line interface;
 - a selector for normally selecting a corresponding line interface to receive a packet stream and, when a failure occurs on a system corresponding to the corresponding line interface, selecting the reserved line interface to receive the packet stream;
 - a header conversion table storing header conversion information for each of said at least one line interface; and
 - a header converter for converting the header of a packet received from the reserved line interface selected by the selector by referring to the header conversion information for the corresponding line interface.

3. (original) The device according to claim 2, wherein said at least one line interface and the reserved line interface have line numbers uniquely assigned thereto,

wherein a line number of each of said at least one line interface and the reserved line interface is transferred to the header converter,

wherein the header converter comprises:

a line number converter for converting a line number of the reserved line interface to a line number of the corresponding line interface; and
a controller for accessing the header conversion information for the corresponding line interface by using the line number of the corresponding line interface.

4. (original) The device according to claim 3, wherein, when the reserved line interface is selected by the selector due to occurrence of the failure, the line number converter converts the line number of the reserved line interface to the line number of the corresponding line interface.

5. (original) The device according to claim 2, wherein the selector is a multiplexer for multiplexing selected outputs of said at least one line interface and the reserved line interface to produce a sequence of packets, which is transferred to the header converter.

6. (original) The device according to claim 5, wherein the multiplexer transfers a line number of each of said at least one line interface and the reserved line interface to the header converter.

7. (original) A device for converting a header of a packet to forward the packet to an appropriate one of output ports of a switch fabric, comprising;
 - a plurality of line interfaces connected to respective ones of incoming lines;
 - a reserved line interface;
 - a first selector for connecting a selected one of the incoming lines to the reserved line interface when a failure occurs on a system corresponding to a corresponding line interface;
 - a second selector for normally selecting each of the plurality of line interfaces and, when the failure occurs on the system corresponding to the corresponding line interface, selecting the reserved line interface in place of the corresponding line interface;
 - a header conversion table storing header conversion information for each of the plurality of line interfaces; and
 - a header converter for converting the header of a packet received from the reserved line interface selected by the second selector by referring to the header conversion information for the corresponding line interface.

8. (original) The device according to claim 7, wherein the plurality of line interfaces and the reserved line interface have line numbers uniquely assigned thereto, wherein a line number of each of the plurality of line interfaces and the reserved line interface is transferred to the header converter,

wherein the header converter comprises:

a line number converter for converting a line number of the reserved line interface to a line number of the corresponding line interface; and
a controller for accessing the header conversion information for the corresponding line interface by using the line number of the corresponding line interface.

9. (original) The device according to claim 8, wherein, when the reserved line interface is selected by the second selector due to occurrence of the failure, the line number converter converts the line number of the reserved line interface to the line number of the corresponding line interface.

10. (original) The device according to claim 7, wherein the second selector is a multiplexer for multiplexing selected outputs of the plurality of line interfaces and the reserved line interface to produce a sequence of packets, which is transferred to the header converter.

11. (original) The device according to claim 10, wherein the multiplexer transfers a line number of each of the plurality of line interfaces and the reserved line interface to the header converter.

12. (original) The device according to claim 2, wherein the switch fabric is an ATM (asynchronous transfer mode) switching device and the packet is an ATM cell.

13. (original) The device according to claim 7, wherein the switch fabric is an ATM (asynchronous transfer mode) switching device and the packet is an ATM cell.

14. (canceled)

15. (currently amended) A method for converting a header of a packet to forward the packet to an appropriate one of output ports of a switch fabric in an ATM (asynchronous transfer mode) switching device having at least one line interface and a reserved line interface corresponding to each of said at least one line interface, comprising the steps of:

[[a]] normally selecting a corresponding line interface to receive a packet stream;

[[b]] when a failure occurs on a system corresponding to the corresponding line interface, selecting the reserved line interface to receive the packet stream;

[[c]] storing header conversion information for each of said at least one line interface; and

[[d]] converting the header of a packet received from the reserved line interface by referring to the header conversion information for the corresponding line interface.

16. (currently amended) The method according to claim 15, wherein said at least one line interface and the reserved line interface have line numbers uniquely assigned thereto,

wherein the ~~step (d)~~ comprises the steps of converting the header
comprises:

receiving a line number of each of said at least one line interface and the reserved line interface;

converting a line number of the reserved line interface to a line number of the corresponding line interface; and

accessing the header conversion information for the corresponding line interface by using the line number of the corresponding line interface.

17. (currently amended) A method for converting a header of a packet to forward the packet to an appropriate one of output ports of a switch fabric in an ATM (asynchronous transfer mode) switching device having a plurality of line interfaces connected to respective ones of incoming lines and a reserved line interface, comprising
~~the steps of:~~

connecting a selected one of the incoming lines to the reserved line interface when a failure occurs on a system corresponding to a corresponding line interface;

normally selecting each of the plurality of line interfaces;

when the failure occurs on the system corresponding to the corresponding line interface, selecting the reserved line interface in place of the corresponding line interface;

storing header conversion information for each of the plurality of line interfaces; and

converting the header of a packet received from the reserved line interface by referring to the header conversion information for the corresponding line interface.

18. (new) A network device including a line interface and a redundant line interface corresponding to the line interface, the network device comprising:

a header conversion table configured to store header conversion information for the line interface; and

a header converter configured to cause the header conversion information for the line interface to be accessed in response to receiving information from the redundant line interface.

19. (new) The network device of claim 18 wherein the header conversion table is not configured to store header conversion information for the redundant line interface.

20. (new) The network device of claim 18 wherein the line interface and the redundant line interface are associated with unique line numbers, and

wherein, when causing the header conversion information for the line interface to be accessed in response to receiving information from the redundant line interface, the header converter is configured to:

convert the line number associated with the redundant line interface to the line number associated with the line interface.

21. (new) The network device of claim 20 wherein the header converter is configured to:

access the header conversion information for the line interface using the line number associated with the line interface.

22. (new) A network device comprising:
a first line interface configured to receive a stream of packets;
a second line interface configured to serve as a backup to the first line interface; and
a header converter configured to receive a packet from the second line interface and convert a header of the packet to appear as if the packet was received from the first line interface.

23. (new) The network device of claim 22 wherein the first line interface is associated with a first line number and the second line interface is associated with a second line number, and

wherein, when converting a header of the packet to appear as if the packet was received from the first line interface, the header converter is configured to:
convert the second line number to the first line number.